A Study on Financial Performance and Valuation Metrics: Application of EVA, MVA, CVA and TSR Techniques

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The study aims at understanding the company practices to measure financial performance and valuation by using various emerging techniques like EVA, CVA, MVA and TSR. These metrics rate a firm's true intrinsic value by examining a series of metrics that reflect its ability to enhance shareholder's wealth, and compares the intrinsic value to the firm's actual market valuation as expressed through a family of MVA multiples. A recent innovation in the field of internal performance measurement is the concept of Cash Value Added which is directly linked to the creation of shareholder value over time. All the models are designed to help investors objectively assess whether what they are buying is really worth it and rates the overall score of the portfolio.

Key Words: Financial Performance, Valuation Technique, Cash Value Added, Total Shareholder's Return, Market Value Added, Economic Value Added

1. Introduction

In today's turbulent economic environment and high volatility of stock price indices, the financial performance of the companies have become an inevitable agent for creating organization values and thereby increasing shareholder's wealth. From the viewpoint of its shareholders, the primary goal of an enterprise is to maximize their profits and enhance their shareholder value. The companies that work efficiently can successfully manage the self – interests and expectations of their stakeholders.

The macroeconomic factors also play an important role in the decision making process of the business and their investments and which in return may affect the interests of the investors of the company. There are several potential sources that restrain firms from hiring and investment plans, due to the uncertainties that may arise in the economy.

Measuring the Financial Performance of the organization is extremely critical from the viewpoint of the long term growth and success of the company. There exists a number of emerging practices and approaches to measure the financial performance of an organization, of which Economic Value Added (EVA), Market Value Added (MVA), Cash Value Added (SVA), Total Shareholder's Return are being popularly practiced and successfully implemented by companies across the globe. Most of the Companies find it extremely challenging to develop strategies for competitiveness in this dynamic and rapid changing business world.

The study attempted at studying the company practices to measure financial performance and valuation using the emerging techniques like EVA, Market Value Added (MVA), Cash Value Added (SVA) and Total Shareholder's Return (TSR). Literature shows that these techniques have the capability to rate firm's true intrinsic value which can enhance shareholder's wealth over a period of time and thereby increasing company's share price in the long run.

1.1 Various Metrics or Techniques to Measure Performance

In the history of performance literature there exist various emerging techniques for measuring the financial performance of a company which provide a better picture of how well the company is performing now and will be performing in the long run. This performance analysis and practices play a very important role in each organization and go a long way to enable an organization with long term sustainable competitive advantage. The measurement of the performance of the company improves the communication internally among its employees, as well externally between the organizations and as customers and stakeholders. There is an increased emphasis on result – oriented management which has created a new climate affecting different sectors. The Financial performance of a company has become increasingly important in this rapidly changing dynamic business environment. This study has shown that the company can remain competitive in the long term which can think like an investor and can take care of all the stakeholder's needs. It plays an important role in benchmarking and business excellence.

1.2 The Emerging Techniques and its Relevance in Company's Wealth Creation

The Economic Value Added has emerged as one of the hottest topics in the area of performance measurement today. Increasing number of companies are adopting EVA model to re-inforce its commitment to the creation of shareholder value. The EVA analysis starts with the premise that investors are primarily concerned with the excess return above the cost of capital. This return can be directly compared with the return expected by the investors, the company's WACC. The value is created / destroyed if the business generates a return above/ below its cost of capital. Companies are striving for excellence by constantly delivering positive EVA.

Similarly there exist some other tools which are used for measuring the financial performance of different sectors and companies that are mostly value based and have been implemented successfully by various global organizations. This research has attempted to study some of the techniques like Cash Value Added (CVA), Total Shareholder's Return (TSR), Market Value Added (MVA) and Activity Based Costing (ABC).

2. Objectives of the Study

a. Application of the emerging techniques for performance measurement and valuation.
b. To know the company's propensity to increase its true economic profit.
c. To know how the market is valuing a company's performance relative to the valuations of all companies in its industry and the overall market.

3. Research Methodology

3.1 Literature Review

For the purpose of establishing a conceptual framework, a comprehensive literature review has been carried out.

The objective of a growing company is to maximize the wealth of its shareholders, who are the true owners of the company. Needless to mention that rational investors expect good long-term yield on their investment. Previously, the concept of shareholder's wealth maximization was being often partly ignored or even misunderstood. Traditional Performance Measurement tools like ROI (Return on Investment), RI (Residual Income), and EPS (Earnings per share) etc only accounts for the costs associated with capital and thereby spotting out the areas of unprofitable investment but do not focus on true economic profit of the company. However, these financial metrics have got very limited applicability in today's competitive market. Hence, organizations, that are applying the traditional Performance Measurement tools, have experienced great difficulty in fitting the measures with increasingly new challenging environment and current competitive realities, in spite of having few advantages. Metrics like Return on investment (ROI) and Earnings per share (EPS) are used as the most important performance measures and even as a bonus base in a large number of companies, although they do not theoretically correlate with the Shareholder value creation very well.

Against this backdrop the Economic Value Added emerged as a financial performance measurement tool that comes closer than any other tools in capturing the true economic profit of an enterprise. EVA also is the performance measure most directly linked to the creation of shareholder wealth over time. EVA® (Economic Value Added) was developed by a New York Consulting firm, **Stern Stewart & Co in 1982** to promote value-maximizing behaviour in corporate managers (**O'Hanlon. J & Peasnell. K, 1998**). It has been found from various research reports that managers are more likely to respond to EVA incentives while making various financial, operational and investing decisions (Biddle, Gary, Managerial finance 1998), being motivated to behave like true owners of the organization. As EVA focuses on ends and not on means, it never dictates how to achieve wealth maximization, thereby giving freedom and scope of creativity and innovativeness to the managers and decision makers.

Sengupta et.al (2008) had demonstrated that Economic Value Added models have not only been used by the Indian corporate as a mere tool for performance measurement but an ultimate yardstick of wealth creation. Although application of EVA as a performance yardstick in India may be at a sprouting stage, various Indian companies are gradually adapting this measure to cater to the increasingly sensitive investor base. A bank's management creates value when it takes decisions that provide benefits, in excess of costs. These benefits may come to banks in the near or distant future depending on the strategies involved in decision making process. While projects are generally viewed financially from NPV or IRR point of view, they may not really convey the fact that whether value is being added to the shareholders. **(Dr. B.P.Verma,2009**)

EVA seek to measure the periodic performance in terms of change in value.. EVA is a value-based measure to evaluate business strategies, capital projects and to maximize long-term shareholders wealth and thereby the value that has been created or destroyed by the firm during the period and is used by the corporate managers in taking decisions like withdrawing value-destructive activities and investments in projects that are critical to shareholder's wealth. Finally this will lead to an increase in the market value of the company**.** EVA attempts at overcoming the problems of traditional measures by setting managerial performance target and linking it to reward systems thereby setting a single goal of maximizing shareholder value unlike diversified goals of various traditional measures. It has been found from various research reports that managers are more likely to respond to EVA incentives while making various financial, operational and investing decisions (Biddle, Gary, Managerial finance 1998), being motivated to behave like true owners of the organization. As EVA focuses on end result and not on means to achieve it, no EVA model dictates how to achieve wealth maximization, thereby giving freedom and scope of creativity and innovativeness to the managers and decision makers. **(Sengupta etc al, 2007)**

Clinton and Chen selected a sample of 325 firms for the years 1991- 1995. Three new performance measures EVA, Cash Flow Return of Investment (CFROI) of BCG and Residual Cash Flow (RCF) are analyzed and evaluated to examine any association of them to Stock Returns. EVA and CFROI produced insignificant or inconsistent correlation with Stock Returns and therefore indistinguishable in their relative lack of contribution to assessing firm value. Nichols in 1998 gives his analysis of the new measures in his work .He states that there is no magic formula which always captures the long- term impact of a business strategy on shareholder wealth. To ask weather EVA is better than CFROI is hard to answer. CFROI is very accurate but complex [18]. Pablo Fernandez analyzed world's 100 most profitable companies using Stock Return, CVA data provided by Stern Stewart. He found that the correlation between the Shareholder Return in 1994- 1998 and the increase in the CVA of BCG was 1.7% [15]. Noravesh and Mashayekhi examined the information content of EVA and CVA against Accounting Income and OCF during 1996-2002 in TSE. The results illustrated that EVA and CVA, in spite of lack of popular knowledge about them, could potentially enter in decision making process in market and sometimes declared incremental information content beyond other measures [6]. Noravesh and Heidari examined the information content of CVA against Operating Profit (OP) and operating cash flow(OCF) during 1999- 2003 in TSE within 110 companies .Results confirmed meaningful correlation between CVA and Stock Returns .Relative information content tests revealed Returns to be more closely associated with CVA than OCF. Incremental information content tests suggested that CVA adds more explanatory power to Returns than OP, OCF [4, 5]. The first work demonstrating the P/E ratio effect was a paper by Nicholson in 1960. He considered 100 mainly industrial stocks over 5 years period from 1939 to 1959.The portfolio of lowest P/E quintile stocks would have delivered an investor 14.7 times his original investment at the end of the 20 years as compared to 4.7 times for the highest P/E multiple [19]. In 1968, Nicholson extended his earlier work by looking at the earnings of 189 companies between 1937 and 1962. Dividing companies into 5 groups by P/E ratio, he found that average returns over 7 years was 131% for companies with a P/E below 10, decreasing almost monotonically to 71% for those with a P/E over 20. Basu's confirmed Nicholson's results (1975, 1977). He examined the information content of P/E ratios in 1975 in NYSE between 1957 and 1971. Results reported that in accordance with the price-ratio hypothesis, trading at different multiples of earnings was neither completely unbiased, nor was the corrective action necessarily timely; on average information that was implicit in P/E ratios was not fully reflected in security prices in as rapid a manner as postulated by efficient market hypothesis. Kramer and Pushner (1997) in a study found that in all items the operating profit after tax, more than economic value added explains on the deviation of the market value added.

3.2 EVA, MVA and other Value Based Models as a Performance Measurement Tool

EVA, MVA and the other value based models provide an inside look at the performance of the companies which disclose the multiple lines of the companies. Measuring the financial performance of a company is the most critical challenge faced by the organizations and they play a key role in achieving organizational goals and developing the strategic plans. The firms are now focusing more on the shareholders value as their long term objective. Because of these reasons firms are depending more on value based metrics for their performance measurement. The Cash flow value added forms an important part of the value based metrics. Due to inadequacies in the traditional performance management system, the organizations now look for an improved financial measure which would help them to overcome the limitations of the traditional financial measures.

4. Market Value Added (MVA) shows the Value Creation

The Stern & Stewart Co. uses a totally different system based on economic principles rather than accounting principles to determine a company’s value. The value that is created for the firm above that value is called the premium value which is called the Market Value Added, also known as Management Value Added. It is a value that is created because of the quality of the management to earn superior rates of return above the required for risk. The Market Value Added is the difference between market value of a company and the capital which is contributed by the investors.

Market Value Added = Market value of the Equity + the book value of debt – all of the capital investors have provided(including loans, retained earnings and paid in capital)

MVA = PV of EVA

It basically means what investors have put into the company and what they could get from the company if they sold the company in today’s market. A positive MVA is more preferred as it indicates that the management has increased the value of its capital, creating shareholder’s wealth. It can also be negative suggesting that the company has destroyed shareholder wealth. It thus indicates that MVA is of great importance for the shareholder’s because it represents premium value created, but the problem is cannot be used as a basic concept in valuation, as it measures the value only till the consolidated level of the company. The MVA is mostly affected by the external forces, for example – 75% of the company’s market value is determined by the factors unrelated to the company’s performance i.e. the general state of the world, interest rates, inflation, economic expectations and industry conditions, all factor into the market value of the company.

4.1 MVA of IT Sector Companies in India

Company	Average of MVA	Rank
TCS	7526858.977	1
Wipro	1365068.938	2
Tech Mahindra	1066590.49	3
Oracle financial services	726128.8047	4
Tata Elxsi	561877.8965	5
Think Soft	285524.4631	6

Exclerx	208074.7932	7
Infosys	129130.7031	8
HCL Tech	86687.3291	9
Polaris Tech	77411.27208	10

(**Source:** *Research done by Ms. Shipra Purthy and Mr. Rajbir kaur Hara, Data: 2011 - 13)*

5. CVA as a Measurement Tool

The CVA discussed above has been developed in Sweden by Erik Ottosson and Fredrik Weissenrieder in 1996. It is a measure of the amount of cash generated by a company through its operations. The Cash value added (CVA) is based on the Net present value (NPV) model and mainly uses its calculations into years, months or certain time period. It does not discount the overall cash flow compared to its overall economic life. It mainly includes the cash items like Earnings before depreciation interest and tax (EBDIT, adjusted for the non cash charges), working capital movement and non strategic investments. The sum of these three items is called the Operating cash flow (OCF). The OCF is than compared with the cash flow requirements i.e. the operating cash flow demand (OCFD). The OCFD is mainly the capital cost required for the company's strategic investments. The CVA classifies the investments into two different categories being strategic and non strategic investments. The strategic investments create value for the shareholders and non strategic maintain the value created by the strategic investments. The CVA represents the value created for the shareholders at a particular point expressed by a difference between the operating cash (OCF) and operating cash flow demand (OCFD).

CVA = operating cash flow – cash flow demand

OCF = operating surplus – working capital change –non strategic investments (where operating surplus is equal to sales) – costs (do not include depreciation and similar accounting items).

The CVA can also be expressed as CVA index when the ratio between operating cash (OCF) and operating cash flow demand (OCFD) is calculated.

It mainly gives an idea to the investor that how well the company is generating cash from one period to another. If CVA > 0 means value is added and if CVA < 0 means value destroyed.

5.1 Implementation of CVA by Global Consultants

COMPANY	THE USAGE OF CVA
Lufthansa Group	The Lufthansa Group uses CVA as their main performance indicator. For the financial year 2011 the CVA for the Lufthansa Group was positive at EUR 99m

(**Source**: Lufthansa Reports)

5.2 A Comparative Analysis between EVA and CVA

Economic Value Added (EVA)	Cash Value Added (CVA)
It is used to calculate value of the company	It is used to calculate the value added above the expectation of the investor in a span of one year
Key points -	Key points -
• It could be based on a faulty book value	• Looks at cash value and not book value
• The aged structure of the business can lead to assessments that are faulty	• It is not influenced by the depreciation policy of the company
• The results are not influenced by taxes	• No distortion of measurement
	• Less complex in calculation as compared to EVA

(Source: IUBH performance measurement)

5.3 Successful Implementation of EVA by Indian Companies

The concept of EVA is catching on fast. Several Indian companies including TCS, Infosys, Dr. Reddy's laboratories and NIIT Ltd have adopted it successfully.

COMPANY	THE USAGE OF EVA
INFOSYS	Here EVA is used as a tool to tell its clients that the value delivered by Infosys is greater than what the client pays for
Marico	Simplified Economic Value Added (SEVA) as a tool for decision making and performance measurement, as a signaling device to tell its employees that capital is important.
DR. REDDY'S LABORATORIES	As a qualifying criterion to grant rewards such a variable pay, stock Options and performance bonuses.

Godrej	Here EVA is linked to compensation and has been implemented in great detail.
NIIT Ltd	EVA is used to bring sharp focus on the effective deployment and leveraging of all assets in the company.
Tata Steel	EVA lays stress on investment management
TCS	EVA is a major input for variable pay

***(Source**: http://sternstewart.in/images/testimonials)*

6. Total Shareholder's Return (TSR)

The **Total shareholder return** is known as the ultimate bottom-line of investment performance. It measures the returns earned by the investment over its period of ownership, including the cash flows. It is mainly the internal rate of return (IRR) which is paid to the investors during a given period of time. It is mostly used as a long term indicator of the comparative success the company has achieved by creating value for its shareholders in the competitive market. The TSR has two components, the price appreciation rate and the dividend yield. As per the Boston Consultancy Group Total Shareholder's Return means -

- Total shareholder return is often referred to as "TSR"
- Change in share price plus dividend yield
- TSR is presented on an annual basis—typically over 1, 3 and 5 year periods
- Yardstick for all investors including hedge funds and mutual funds
- Required reporting in proxy statements
- Easily benchmarked on relative basis as shareholder's true bottom line

(Source: Defined by BCG Group, BCG Analysis)

6.1 TSR Measurement Tool

The potential investors regularly look at the total return to shareholders as an important metric for creation of value. These metric breaks up into four fundamental parts: a company's operating performance, its stock market valuation at the beginning of the measurement period, changes in stock market expectations about its performance, and its financial leverage. It is calculated as follows –

Total Shareholder Return (TSR) = (Ending stock price – beginning stock price) + sum of all the dividends received during the measurement period.

TSR integrates all the dimensions of creating value which are better than the other accounting and cash based metrics. The TSR performance is mainly broken down into key drivers of value creation like – the growth of EBITDA (Earnings before interest, tax, depreciation and amortization) which indicates improvement in the fundamentals of the company, the change in EBTDA (Earnings before tax, depreciation and amortization) to know the changes in the investor expectation, the distribution of free cash flow to the investors and debt holders and measure the impact paying out cash or raising the capital and the minimum appropriate return to shareholders goal is easy to establish. The top – quartile companies need to improve their valuation multiple, as it is the common contributor to the near term Total Shareholder's Return. The proper implementation of a three step process would help the company in implementing an integrated value creation strategy.

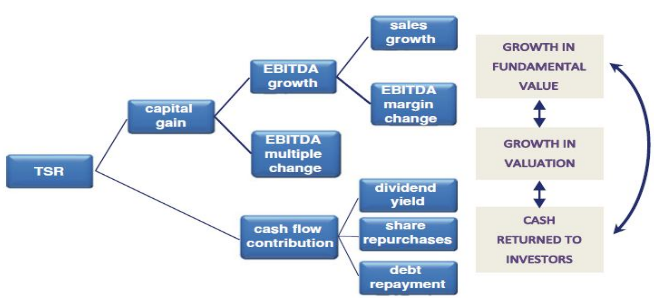

Figure 6.1 *Value Drivers of TSR*
(Source: *Boston Consulting Group Analysis 2008)*

If the TSR is decomposed than it will give a better picture on how the measure derives from changes in its operational performance. For this the TSR equation needs to be split up into four different parts like –

- The value which is generated from the revenue growth and the net capital which is required for the company to grow. This will mainly show the company's improvement in margins and its capital productivity. It also shows the company's operating performance changes over a period of time.
- The reflection of the company's stock market valuation at the beginning of the period i.e. without using the measures in the first part.
- The perception of the shareholder's about the company performance using the P/E and other multiples.
- The impact of the financial leverage on the Total Shareholder's Return.

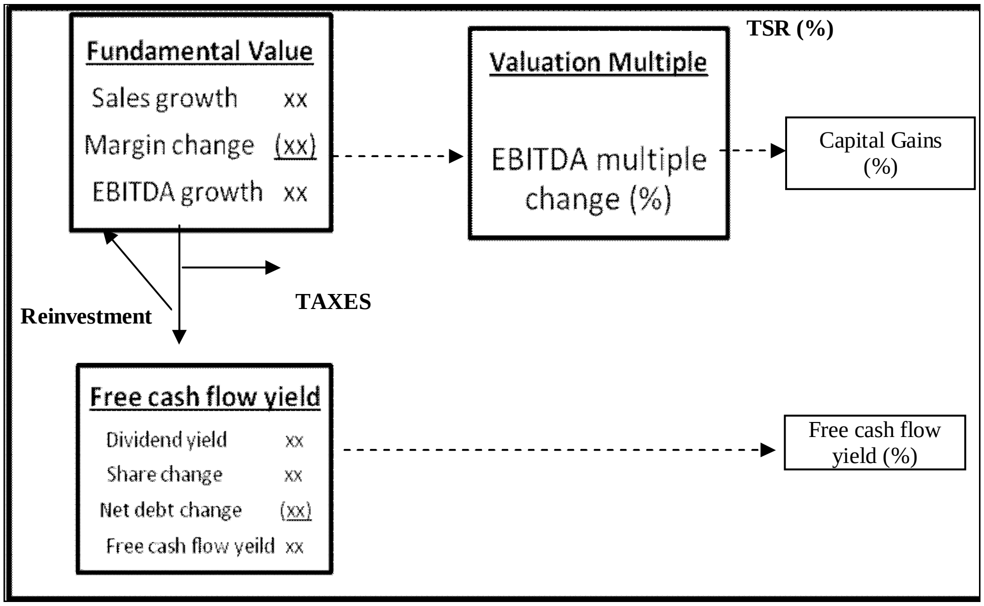

Figure 6.2 *BCG's Decomposition Model to Identify the Sources of TSR*
(**Source***: Thomson Financial Datastream; Thomson Fincial Worldscope; Bloomberg; BCG Analysis)*

For the assessment of the historical performances of the different companies, the stock market performance of the company is usually compared using the two important indicators. The first being the TSR and second is the ratio of market value to the invested capital.

Measurement of TSR of the global companies:
As a fact of measurement, Heineken had struggled over the years to generate a positive return to their shareholders. Tough the market had high expectations from the company; it was unable to keep up the pace with the expectations.
(Source: Mckinsey and company guide, 5th Edition)
The Top TEN in the Automotive Sector (Average annual Total Shareholder's Return) –

Table 6.1 *Reports and Results of TSR of Different Companies in Different Sectors*

#	COMPANY	COUNTRY	TSR (%)
1	HYUNDAI MOBIS	SOUTH KOREA	87.6
2	HANKOOK TIRE	SOUTH KOREA	57.8
3	BAJAJ AUTO	INDIA	56.7
4	HYUNDAI MOTOR	SOUTH KOREA	56.7
5	MAHINDRA & MAHINDRA	INDIA	52.0
6	TATA MOTORS	INDIA	50.3
7	ASTRA INTERNATIONAL	INDONESIA	48.4
8	HERO HONDA MOTORS	INDIA	45.1
9	CONTINENTAL	GERMANY	37.1
10	DENWAY MOTORS	HONG KONG	36.2

(**Source**: *Thomson Financial Datastream; Thomson Financial Worldscope; BCG Analysis: 2001-2005)*

Table 6.2 *TSR Chart Outcomes of Different Banks*

#	BANKS	TSR (%) (APPROX)
1	LLOYDS BANKING GROUP PLC	-1.5 %
2	AVIVA	-5%
3	BARCALYS	1%
4	HSBC HOLDINGS PLC	1%
5	PRUDENTIAL PLC	12.5%
6	ROYAL BANK OF SCOTLAND	12.5%
7	STANDARD CHARTERED	-28%

(**Source:** *LLOYDS BANKING GROUP, DEC - 2014)*

7. Activity Based Costing (ABC)

In today's world the organizations mainly desire to understand their costs and the other related factors that drive their cost. In this competitive environment the organizations are seeking to maintain their cost information which is more accurate and relevant. In the past many companies planned and controlled their operations using the accounting information which was assumed to be accurate. But due few misleading information and to overcome the over – generalizations of the traditional systems, the organizations have started adopting the Activity based costing (ABC) systems. These systems are mainly based on those models which trace both the direct and indirect expenses, products, services, channels and the customers that cause these expenses to be incurred. It gives visibility to the work activities and their costs. ABC firstly originated in the manufacturing sector, but there were subsequent implementations by organizations in different sectors of the economy, which lead to its usage on a global platform

7.1 ABC Measurement Tool

The ABC systems are viewed in two different ways i.e. the Cost assignment view and the process view. The Cost Assignment view mainly provides information related to the resources, cost objects and the activities. On the other hand the process view shows the processes and activities that provide operational information about the business. The ABC system does not replace the accounting system, but it restates the same data and adds the operating relationships for effective decision making. The below diagram shows the Activity based cost management framework.

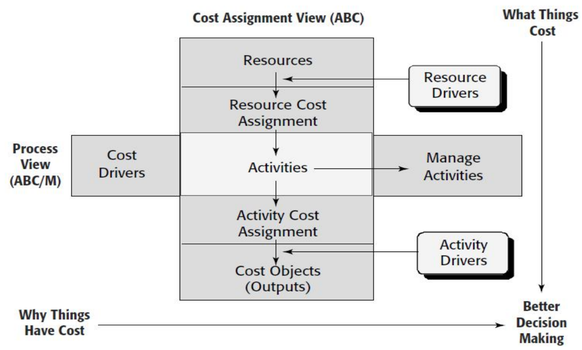

Figure 7.1 *Activity Based Cost Management Framework*
*(**Source**: The Consortium of Advanced Manufacturing–International (CAM-I), 1990)*

The Cost Assignment view transforms the expenses of the resources into costs of the work activities, which are ultimately the final cost objects. On the other hand the process view sequences the work and the activities on time and builds up the activity cost from start to the end of the business and the related work processes. Apart from the two stages ABC approach, there is also a Multiple Stage ABC approach which is advancement to the ABC model of working and includes understanding of the relationship between the direct and indirect work activities and also the cost objects. The costs are traced using the cause and effect relationship between them. There is process to be followed while measuring the Activity Based Costing of a particular organization like

- other activities Identifying the work activities to be performed by people and the organization's equipment
- Identifying the different elements of cost and performance measures of the organization
- Determining the relationship between the activities and elements of cost
- Identifying and measuring the activity drivers that determine the work load and cause the accumulated activity costs to flow or the products and services

(Source: Strategic cost management (SMA)

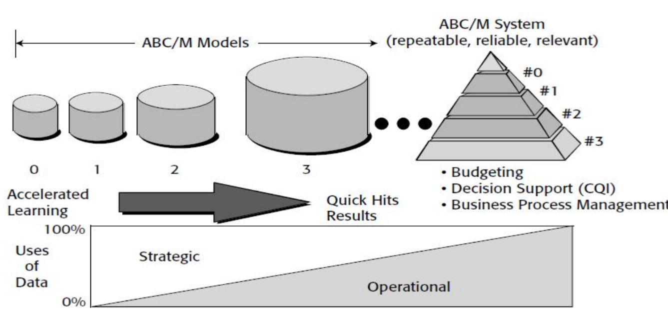

Figure 7.2 *ABC Rapid Prototyping with Iterative Remodeling*
*(**Source:** Gary Cokins)*

8. Conclusion

EVA measures the creation of wealth. It is also as short-term as all other periodic performance measures. Therefore all companies should consider also on other performance measures like value based measurement systems. EVA can be important measure for those companies that use primarily other tools is assessing the achievement of their strategic goals. The reward is that the size of the EVA pie could become different as it gets enlarged and the individual and the corporation appear to benefit considerably. It ensures the communication of information across levels and each entity can see how it fares against targets. It enhances the sense of participation through the realizatation of the share in the larger pie, and provides the motivation to contribute to enlarge the pie. EVA really forces the organization to adopt a proper business planning approach, gets a focus on strategies, and helps monitor the accountability of people. In short, it gives a guage on how the organization is being run and mandates critical short taking to evolve on a continuous improvement path. Implementation of EVA requires the integration of the planning and the tracking process. TCS tried to achieve this through a home grown tool called e-pilot, which essentially drills down from strategy to day to day activity. This facilitates the integrated planning approach, in defining the corporate EVA, linking it to the business unit/ cell, and further to various components down the line, all the way to the drivers connected to each activity. Value Based Management is a corporate philosophy that emphasize on maximizing shareholder's wealth in the long run which is to be practiced at the enterprise level. At the beginning step, it is important to identify all the value drivers that influence the company value and then it is essential to capture all these factors to reflect in the calculation of financial metrics. Some of the most popular emerging indicators like TSR, EVA, MVA, SVA etc have been successfully used by global organizations to demonstrate their value creation process.

9. References

Research Papers

1. **Sengupta & Dutta (2011)** "Economic Value Added: A Yardstick for Performance Measurement", published by Indian Journal of Finance, ISSN 0973-8711, Vol 5, No.7, July, 2011.
2. **Sengupta, Prajapati & Dutta (2008),** "Economic Value Added: A management tool for performance measurement or an ultimate yardstick of wealth creation?" Conference Proceedings (CISTM-2008) jointly organized by Confederation of Indian Industry (CII), IIT Delhi and Virginia Commonwealth University, 31st July- 2nd August, 2008
3. Dr. B P Verma, Economic value addition by Indian Banks: A study, Retrieved in January 2009 from http://www.utiicm.com/Cmc/PDFs/2002/bpv%5E59.pdf
4. Al Ehrbar,(1998) EVA: The real key to Creating Wealth, New York: John Wiley & Sons 1998
5. Arundhuti Dasgupta *(July2002)* "Why Godrej Is Captivated by EVA" *Indian Management*
6. Brealey Richard A. & Mayers Stewart C. (1991). *Principles of Corporate Finance.* 4th Edition. McGraw-Hill Series in Finance. McGraw-Hill, Inc. NewYork.
7. Economist August 2nd 1997, p.57-59. "Valuing companies: A star to sail by". *The Economist.*
8. G.Benett Stewart III (1991) The Quest for value, New York, Harper Business,
9. Pablo Fernandez, (April 2004) "Three Residual Income Valuation methods and Discounted Cash Flow Valuation" The ICFAI journal of applied science
10. Pamela Peterson "Value-Added Measures of Performance" Florida State University
11. Prasanna Chandra (2001) "Financial Management" Tata McGraw-Hill Publishing Company Limited, New Delhi.
12. Wallace JS. (1997). "Adopting residual income-based compensation plans: Evidence of effects on management actions". *Working paper,* University of California, Irvine, CA.
13. "CVA, Cash Value Added - a new method for measuring financial performance", By Erik Ottosson and Fredrik Weissenrieder. Gothenburg Studies in Financial Economics, Study No 1996:1.)
14. CMIE Database published by Centre for Monitoring Indian Economy, Bombay
15. Ferguson,(1998),Search For Best Financial Financial Measure, Financial Journal,Vol.54,No.-1, Jan.
16. Grant, C., (1996), Foundation Of EVA for Investment Manager ,Journal of Portfolio Management ,Vol. 23, No. 1.
17. Jenson, c. and Murphy,J.,(1990), Performance Pay and Top Management Incentives , Journal of Political Economy, Vol. 98, No. 2 April .
18. Kilroy, (1999), Creating the Future: How Creating and innovation drive shareholder wealth, Management Decision,Vol. 37,No. 4.
19. Knight, A.,(2003), Value Based Management : Developing a Systematic Approach to Creating Shareholder Value, The Journal of Applied Finacial, Vol. 9, No. 1.
20. Lieber, B., (1996), WHO ARE THE REAL WEALTH CREATER, Fortune,Vol. 134,No.
21. 23, December.
22. Maclaren,J.,(2003),A Stern test , Financial Management, July/August.
23. Stewart,(1991), ,The Quest for Value, Harper Business, New York.
24. Tully (1993), The Real Key to Creating Wealth,Fortune, Vol.128,No.6,Sep.

Web links

- http://www.iimb.ernet.in

- http : //www . peterkeen . com
- www. garnet.acns.fsu.edu
- www.business-standard.com
- www. I nvestopedia . com
- www.sternstewart.com
- http://www.sternstewart.com/search.html
- file:///C:/Users/Dell/Downloads/CVA.pdf
- http://www.investopedia.com/terms/c/cva.asp
- http://smallbusiness.chron.com/cash-value-added-cva-mean-20290.html
- http://pruss.narod.ru/Erik_CVA.pdf
- http://www.sid.ir/en/VEWSSID/J_pdf/81420074702.pdf
- file:///C:/Users/Dell/Downloads/SSRN-id270799.pdf
- http://reports.lufthansa.com/2011/ar/combinedmanagementreport/companyandorganisation/value-basedmanagementandtargets/cashvalueadded.html
- https://www.youtube.com/results?search_query=cash+value+added
- file:///C:/Users/Dell/Downloads/CVA%20(1).pdf
- http://www.investopedia.com/terms/t/tsr.asp
- http://www.stockopedia.com/content/how-do-you-calculate-total-shareholder-return-tsr-67596/
- http://www.mckinsey.com/insights/corporate_finance/a_better_way_to_understand_trs
- https://www.radford.com/relativetsr/files/Whitepaper_TSR_HowTo_Guide.pdf
- http://www.bcg.com/documents/file14876.pdf
- http://www.lloydsbankinggroup.com/investors/shareholder-info/total-shareholder-return-charting/
- http://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/ACCOUNTING%20Activity-Based%20Cost%20Management%20-%20An%20Executive%27s%20Guide.%5B2001%5D.pdf
- http://www.untag-smd.ac.id/files/Perpustakaan_Digital_1/ACCOUNTING%20Activity-Based%20Cost%20Management%20-%20An%20Executive%27s%20Guide.%5B2001%5D.pdf
- http://www.imanet.org/PDFs/Public/Research/SMA/Implementing%20Activity%20Based%20Costing.pdf